

(43) International Publication Date29 December 2004 (29.12.2004)

PCT

(10) International Publication Number WO 2004/113456 A2

(51) International Patent Classification7:

C09D 4/00

(21) International Application Number:

PCT/CH2004/000383

- (22) International Filing Date: 23 June 2004 (23.06.2004)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 03405455.1

23 June 2003 (23.06.2003) E

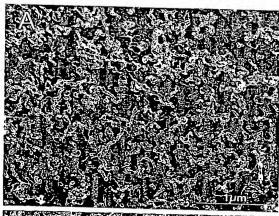
- (71) Applicant (for all designated States except US): UNIVER-SITY OF ZURICH [CH/CH]; Office Vice President for Research, Rämistrasse 71, CH-8006 Zürich (CH).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): ZIMMERMANN, Jan [DE/CH]; Birmensdorferstrasse 202, CH-8003 Zürich (CH). SEEGER, Stefan [DE/CH]; Dorfstrasse

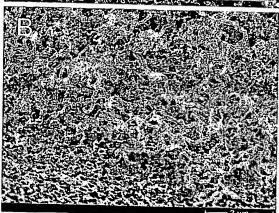
69, CH-8126 Zumikon (CH). ARTUS, Georg [DE/CH]; Risirainstrasse 4, CH-8903 Birmensdorf (CH). JUNG, Stefan [DE/CH]; Blütenstrasse 23, CH-8057 Zürich (CH).

- (74) Agent: UNITECTRA; Möhrlistrasse 23, CH-8006 Zürich (CH).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH,

[Continued on next page]

(54) Title: SUPERHYDROPHOBIC COATING





(57) Abstract: A composition for coating comprising at least one compound of formula (I): $R^a Si(R^1)_n(X^1)_{3-n}$, and optionally at least one compound of formula (II): $R^b Si(R^2)_m(X^2)_{3-m}$, wherein R^a is a straight-chain or branched $C_{(1\cdot 24)}$ alkyl group, R^b is an aromatic group, such as an optionally substituted carbocyclic and heterocyclic group comprising five-, six- or ten-membered ring systems, which is linked by a single covalent bond or a spacer unit, such as a straight-chain or branched alkyl residue having 1 to 8 carbon atoms, to the Si- atom, R^1 and R^2 are independently of each other a lower alkyl group, such as a straight chain and branched hydrocarbon radical having 1 to 6 carbon atoms, X^1 and X^2 are independently of each other a hydrolysable group, such as a halogen or an alkoxy group and n, m are independently of each other 0 or 1, with the proviso that if n and m are independently of each other 0 or 1, X may represent the same or different groups.

BEST AVAILABLE COPY



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

 without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.